USASP Inaugural Meeting December 9-11, 2020

Transforming Pain Science & Care in Challenging Times

(Opioid Crisis, COVID-19 Pandemic, and Systemic Racism)

December 9th, 2020

Early Career Programming | 2:00-3:00 PM EST

Finding the right postdoc position	Jamie Mizy or Carla Moore
Applying to the job market	Jerri Salmon or Janelle Larsen
Getting your article accepted for publication	Sarah Ross or Mark Jensen
Finding your research mentor	Dennis Ang or Carla Moore
Careers in the private sector	Becky Kline or Don Manning
Setting up your lab	Kathleen Sluka or Buser Goodin
Overcoming challenges faced by underrepresented groups in science	Charles Jonassaint
Prospective supervisor, perfectionist and other common pitfalls	Jennifer Haythornthwaite
Overcoming challenges for international students	Anne Sophie Wakid or Marina Lopez-Sola
Women in academia	Cheryl Sluzky or Tonya Palermo
Building a culture of diversity and inclusion in your lab	Therdore Price or Roger Fillingim

Poster Presentations | 3:00-4:00 PM EST

Poster Presentations	Various Speakers

Plenary Speakers Presentation | 4:00-4:40 PM EST

Title: Pain Science Research and Care in Challenging Times: Opioid Crisis, COVID-19 Pandemic, and Systemic Racism

Amy Bohnert, PhD, MHS - Associate Professor Department of Anesthesiology, Perioperative and Pain Medicine Stanford Pain Management Research and Development Center of Innovation, Department of Veterans Affairs

December 10th, 2020

Concurrent Sessions | 4:45-5:15 PM EST

Title: Strategies for Building Interdisciplinary Collaborations To Daily Measurement Pain Research: Lessons Learned, A 3-Pillar Translational Approach

Ericka N. Merriwether PT, DPT, PhD - Assistant Professor New York University

Michael Burton, PhD - Assistant Professor University of Texas at Dallas

Description: The panelists will address topics related to building interdisciplinary collaborations to provide the building validation of a preclinical model of chronic musculoskeletal pain, translational research to human studies, and the development of novel measurement tools and analytic approaches for mechanism-based phenotyping in clinical pain studies to improve understanding of the mechanisms underlying the transitions and persistence of findings that are useful in clinical decision-making, clinical scientists, and basic scientists.

Objectives: Introduction/Detailed Introduction to OUCH among patients on LTOT for pain?: Pros, cons, and preliminary findings

Nitish Sabouni, PhD - Associate Professor Columbia University

Christopher D King, PhD - Associate Professor Columbia University

Description: Topics discussed include a) Sex differences in pain and analgesia, b) Sex differences in the neurobiology of pain in male and female rats, c) Sex differences in Pavlovian conditioned vs. instrumental pain behaviors, d) Sex differences in Conditioned Inhibition of Pain Signals (CIPS), e) Impact of inflammatory mediators on the functional connectivity of the rat brain, f) Sex differences in functional connectivity using RNA and RNA-binding protein control pathway in nerve-injury induced pain (Sutton et al. 2014) g) The role of long noncoding RNA loci in inflammation (Ali)

William Becker, MD - Associate Professor Yale School of Medicine

Ellen Eales, MD, MA, MPE - Associate Professor Yale School of Medicine

Karen Dwyer, MD - Program Director for Addictive Disorders in VA Central Office

Ajay Manhapra, MD - Interim Hospitalist VA Medical Center

Sara Edwood, PhD - Associate Research Scientist Yale School of Medicine

Joanna Starrett, MD, MS - Associate Professor Albert Einstein College of Medicine

Title: Post-transcriptional Control Mechanisms in Pain

Diana Tavares-Ferreira, PhD - postdoctoral fellow Sel Pilon lab, University of Texas at Dallas

Tarsha Smith, PhD - postdoctoral fellow Jeff Tarsa lab, University of Texas at Dallas

Description: Topics discussed include a) Sex differences in Pavlovian conditioned vs. instrumental pain behaviors, b) Sex differences in pain and analgesia, c) Sex differences in the neurobiology of pain in male and female rats, d) Sex differences in functional connectivity using RNA and RNA-binding protein control pathway in nerve-injury induced pain (Sutton et al. 2014) e) The role of long noncoding RNA loci in inflammation (Ali)

Bryan de la Pena, PhD - Postdoctoral Fellow Jun Chen lab, University of Texas at Dallas

Molly Moffat, PhD - Associate Professor Pennsylvania College of Biological Chemistry, Lehigh Valley Health Network School of Medicine

Seena Ajit, PhD - Associate Professor in the Department of Pharmacology & Neuroscience Tufts University School of Medicine

Joshua Pate, PT, PhD - Postdoctoral Fellow Tufts University Technology Battery Consortium on Pain Health

Sarah Martin, PhD - Assistant Professor UT Southwestern Medical Center

Anya Griffin, PhD - Clinical Associate Professor Stanford University

Katherine Tansey, PhD - Postdoctoral Fellow UT Southwestern

Title: What are our options? Innovative assessment and complement approaches to evaluate chronic pain phenotypes in clinical trials

Debra K. Weiner, MD - Professor Emeritus Pittsburgh Healthcare System, University of Pittsburgh

Mary Jaremin, MPH, PhD - Associate Research Scientist Yale University School of Public Health

Description: Because older adults with chronic pain often have multiple comorbidities, treatment goals may include accessing care, personalized and pragmatic management strategies, and improving QOL. Pain assessment in this vulnerable population is challenging. Dr. Weiner will present data supporting a personalized/targeted approach to evaluating and managing chronic pain in older adults. Dr. Jaremin will present indicators and preliminary data for a novel behavioral health coach delivered intervention that targets comorbid pain and mood disorders in cancer survivors. Based on this outlook, Dr. Jaremin will describe finding from a pilot study of a chronic pain self-management intervention for African American cancer survivors with a focus on the feasibility of adapting a mobile-based mobile health tool.

Objectives: Introducing the "pain versus pain" phenomenon: From rodents to humans and back again

Kirsty Bannister, PhD - Senior Pain King's College London

Thomas Nickerson, DMSc, PhD - Professor Kalbing University

Description: In this session, Dr. Bannister will give a brief history of diffuse noxious inhibitory controls (DNIC) data in rodents and how this has been translated into human psychophysical and autonomic arousal work as the central amygdala, cell exert control. Prof. Nickerson will then discuss some of the work he has been involved in with DNIC in humans and the implications that are known to affect the corresponding human pain versus pain phenomenon. Dr. Bannister will then discuss the work of his recent work studying CPM in chronic pain patients. Dr. Harper will discuss the handful of studies using brain neuroimaging to study the central mechanisms underlying DNIC in humans. Finally, Dr. Bannister and Dr. Harper will discuss their recent successful back-translation of a CPM paradigm from humans to rodents for humans to a DNIC paradigm.

Daniel Harper, PhD - Postdoctoral Fellow Emory University

Title: Ocular pain: emerging concepts in the clinic and research

Ariel Galor, MD, MSPH - University of Miami School of Medicine

Deborah Jacobs, MD, MS - Associate Professor Harvard Medical School

Eric Moulton, DD, PhD - Assistant Professor Boston Children's Hospital Harvard Medical School

Gabriela Deckmann, MD, PhD - Associate Medical Director Alcon Pharmaceuticals

Description: While animal research has significantly advanced our understanding of the neurobiology of pain, clinical research and patient care have lagged behind. This workshop brings together the latest advances in ocular pain research and clinical care, and provides a forum for interdisciplinary collaborations to improve our ability to address clinically relevant questions.

Objectives: Pain Science in Cannabinoids and Terpenes as Potential Pain Therapeutics

Sally Largent-Milnes, PhD - Assistant Professor University of Arizona

John M. Strachan, PhD - Assistant Professor University of Arizona

Zoe Cooper, PhD - Assistant Professor UC Los Angeles

Sara Ward, PhD - Assistant Professor Temple University

Description: In this session speakers will discuss recent research on the use of cannabis and terpenes as potential pain therapies. Topics include non-psychoactive cannabinoid alternatives, the cannabinoid, that has central side effects, the use of terpenes as analgesics, the use of terpenes in the Cannabis plant, which produce pain relief through different receptors than cannabinoids, and terpenes in pain relief. We also explore new approaches to modulate the body's own cannabinoid system to treat pain, including inhibitors of the enzymes that degrade endogenous cannabinoids. We will also explore approaches suggest a path forward to pain therapeutics without the drawbacks of either opioid or cannabinoid therapy.

December 10th, 2020

Most, Connect, Collaborate: Networking opportunities | 2:00-3:00 PM EST

Musculoskeletal pain	Group Discussions
Orofacial pain	Group Discussions
Neuropathic pain	Group Discussions
Developmental aspects of pain	Group Discussions
Pain and aging	Group Discussions
Neuroimaging	Group Discussions
Psychological measures	Group Discussions
Behavioral pain measures- pre-clinical models	Group Discussions
Behavioral pain measures- human models	Group Discussions
Pain Circuits	Group Discussions
Anti-Circuits	Group Discussions
Neuroimmune interactions	Group Discussions
Opioid mechanisms	Group Discussions
Genetic disorders	Group Discussions
Clinical practice multidisciplinary pain care	Group Discussions
Ph.D./ Other Doctoral students	Group Discussions
Postdoc	Group Discussions
Early faculty	Group Discussions
Mid-career	Group Discussions
Opioid crisis	Group Discussions
COVID-19 pandemic	Group Discussions
Systemic racism	Group Discussions

Poster Presentations | 3:00-4:00 PM EST

Poster Presentations	Various Speakers

Plenary Speakers Presentation | 4:00-4:40 PM EST

Title: Pain Science Research and Care in Challenging Times: Interventions in the Era of Covid-19: Issues and Opportunities

Francis J Keefe, PhD - Professor in Psychiatry and Behavioral Sciences, Psychology and Neuroscience, Anesthesiology and Medicine Duke University School of Medicine

Description: E-health interventions provide new opportunities for managing chronic pain remotely in the current pandemic. Dr. Keefe will discuss research on the use of CBT for pain in disabled little pain. In the report, the rationale for using a health interventions (e.g., telehealth, internet-based, voice recognition) for managing chronic pain in the current pandemic and in the post-Covid 19 pandemic. In the second part, the pros and cons of different e-health interventions are discussed. The final part of the talk will focus on the ethical issues that are most in the important and emerging field.

December 11th, 2020

Concurrent Sessions | 4:45-5:15 PM EST

Title: Lost in Translation? Current state of preclinical pain research and its translation

Tamara King, PhD - Associate Professor University of New England

Mark Zylka, PhD - Associate Professor UNC Chapel Hill

Description: Dr. Tavella will discuss the importance of performing clinically-informed basic science, in particular, what we can learn from the translational failure of gabapentin and pregabalin analogs to improve translational research. Dr. King will discuss how her lab uses pain relief induced conditioned place preference to study the neurobiology of pain and how it relates pain in parallel with measures of condited pain to assess similarities and differences between spontaneous and evoked pain. Dr. Zylka will discuss how his lab uses mice to develop a machine learning algorithm that can quantify spontaneous pain in black and white-coated mice from facial expressions. Dr. Ross will discuss how he uses human iPSC and induced neurons to permit insight into the mechanisms of human pain.

Vinzenz Tavella, MS, PhD - Assistant Professor Stanford University

Kristofer S. Bouchard, PhD - Pivot Doctoral Fellow Berkeley College of Professions

Title: New Avenues in Chronic Pain Research – an Epigenetic approach

Edwin N. Antoshin, Ph.D. - Assistant Professor, University of Maryland, School of Dentistry

Nicole Cunningham, PhD - Assistant Professor University of Minnesota, School of Medicine

Laura Stone, PhD - Postdoctoral Fellow University of Minnesota, School of Medicine

Andrea Knight, MD, MSc - Assistant Professor University of Toronto

Description: Disparities within medical care are evident given the impact of pain on minorities and the poor QOL and high pain intensities reported by minorities. Research studies involving pain. This symposium will highlight these disparities in pain research and care. Dr. Antoshin will discuss how epigenetic dysregulation contributes to Systemic Lupus Erythematosus (SLE) and Sickle Cell Disease (SCD). Dr. Cunningham will discuss the impact of pain on Black women's sleep and fatigue. Dr. Knight will discuss a pain screening and treatment for minoritized individuals with chronic pain. Dr. Stone will discuss the impact of the current epidemic of COVID-19 on individuals with chronic pain, specifically disproportionately impact marginalized individuals, and 3) Implications of the current epidemic of COVID-19 on pain psychological problems to meet the needs of individuals with such chronic pain conditions.

Sounitri Sil, PhD - Postdoctoral Fellow Emory University School of Medicine

Objectives: Understanding Gen Differences in Pain in Different End-Organ Systems: From Nerve Fiber Integrity to Pain Behaviors

Scott A Holmes, PhD - Instructor Boston Children's Hospital Harvard Medical School

Christine B. Sieberg, PhD - Assistant Professor Boston Children's Hospital

Description: In this session, participants will provide evidence of sex differences in nerve fiber integrity, inflammation, and pain behaviors in the peripheral nervous system. Presenters will be examining how sex differences in peripheral female preclinical research as well as new perspectives on sex differences in pain research. Dr. Holmes will discuss how the contact of neuropathic pain, post-traumatic headache, and visceral end-organ systems is cohorts that range from adolescent to adult. Dr. Sieberg will discuss the implications for integrating sex-based methods into research programs.

Megham E Pierce, PhD - Postdoctoral Fellow Boston Children's Hospital

Jeffrey S Mogil, PhD - Professor Pain Genetics Research Chair in Pain Studies Director, E. P. Taylor Chair in Pain Studies McGill University

Title: A debate on Neuropathic Pain: Central vs. Peripheral

A. Vania Apkarian, PhD - Professor and Director Pain Imaging Neuroscience Director Center of Excellence for Chronic Pain Research Abuse Research Northwestern University Feinberg School of Medicine

Dennis Mantyh, PhD, MD - Assistant Professor Chief Medical Officer Chronic Pain Rehabilitation Center of Excellence Veterans Affairs Medical Center University Feinberg School of Medicine

Description: While many neuropathic pain conditions are thought to cause damage to the peripheral nervous system, their persistence appears to rely on maladaptive processes occurring in the central nervous system. Dr. Apkarian will discuss this and suggests the same may be true of the PNS and the CNS in the generation and maintenance of neuropathic pain.

Theodore Price, PhD - Eugene McDermott Professor Program in Pain Medicine Neuroscience University of Texas at Dallas

Gregory Corder, PhD - Assistant Professor Department of Anesthesiology & Pain Medicine Department of Neuroscience Washington University School of Medicine

Title: Pain-Related Stigma in Adolescents with Primary Chronic Pain: An Intersectional Lens to Understand Its Impact

Emily D. Wallwork, Psy.D. - Assistant Professor, University of Pittsburgh School of Medicine

William T. Zempsky, MD, MPH - Professor and Endowed Chair for Pediatric Pain Medicine Yale School of Medicine Connecticut School of Medicine

Description: Adolescents with primary chronic pain often do not receive objective clinical evidence of their pain, as a result when seeking medical care, many adolescent patients feel stigmatized and invalidated by healthcare providers. Dr. Wallwork will discuss the impact of pain-related stigma in adolescents with chronic pain. Dr. Wallwork will discuss her work understanding the intersectional experiences of pain-related stigma in adolescents with chronic pain. Ms. Revillo will expand upon patient and parent experiences of pain-related stigma in healthcare settings and the impact of diagnostic uncertainty and invalidation. Dr. Zempsky will present the physician perspective on challenges associated with pain-related stigma in adolescents and provide treating adolescents with chronic pain may unknowingly contribute to pain-related stigma. Specific challenges will include implicit bias, the impact of medical trauma, the impact of medical uncertainty, medical ambiguity, and the management of patients looking for rapid treatment relief. The presenters will also discuss how healthcare providers can be stigmatized alongside within their patients.

Patrick Finan, PhD - Associate Professor Johns Hopkins School of Medicine

Ishtiaq Mawla - Postdoctoral Fellow Neuroimaging of the Human Pain Lab, University of Michigan

Title: Targeting Brain Networks to Reduce Pain: Opportunities and Challenges for Pain Neuroscientists and Clinicians

Tim Salomons, PhD - Assistant Professor Queens University

Siobhan Schabrun, PhD - Senior Research Scientist NeuroSpeciality, Monash University

Description: Multiple promising directions for pharmacological intervention have emerged in the context of chronic pain research. Dr. Finan will discuss how that acquisitions modulates primary somatosensory functional connectivity and how this may be a useful target for pain relief. Dr. Mawla will present new data showing that sensorimotor cortical plasticity is associated with pain relief and that this may be a useful target for pain relief. Dr. Salomons will discuss how a non invasive pain modulation alters amygdala connectivity and pain vigilance, and how both of these may be useful for DBS circuit mapping with implications for pain and its interaction with cognition.

December 11th, 2020

Early Career & Great Group Session | 2:00-3:00 PM EST

Training grant abstract soup (Ks, T4, and other related grants): What they are, how to get one	Group Discussion

Poster Presentations | 3:00-4:00 PM EST

Poster Presentations	Various Speakers

Plenary Speakers Presentation | 4:00-4:40 PM EST

Title: The Guideline Epidemic and Pain Care: Lessons From Converting High Stakes Pain Guidelines

Salimah H Meghani, PhD, MBE, RN, FAAN Professor of Nursing & Medical Ethics Director, Center for Evidence-Based Practice Nursing Associate Director, NewCompass Center for Transitions and Health Senior Fellow, Leonard Davis Institute of Health Economics

Description: This presentation will discuss key lessons from converting high stakes pain guidelines into clinical practice implications for payers and providers to assess pain and widening of pre already applying pain care disparities. The presentation will also discuss how to use the lessons and applied in consuming highly consequential pain guidelines in practice.

Concurrent Sessions | 4:45-5:15 PM EST

Title: Pain and Sleep Disturbances in Disadvantaged Populations: Implications for Pain Assessment and Disparities to Promote Good Health in Pain

Yoshiaki Cruz-Almeida, PhD - Associate Professor, University of Florida, College of Dentistry

Emily F. Law, PhD - Associate Professor Department of Anesthesiology & Pain Medicine Department of Psychiatry & Behavioral Sciences Washington School of Medicine & Seattle Children's Research Institute

Description: Sleep is an important determinant of overall health and a prerequisite for optimal functioning. Dr. Law will discuss across the lifespan. Dr. Cruz-Almeida will present data on sleep and pain in a diverse community sample and discuss approaches to study pain and sleep disturbances in physically healthy older adults. Dr. Law will present results from a pilot study of a sleep-focused intervention for youth with chronic musculoskeletal pain and discuss how this intervention will be presented. Dr. Goodin will present data addressing social determinants of health and pain and sleep disturbances and discuss how the pain and sleep disturbances may be contributing pain to meaningfully improve children's pain management.

Buser Goodin, Ph.D. - Associate Professor Department of Psychology, University of Alabama at Birmingham

Title: Rethinking the Policy Changes to Improve Treatment of Chronic Pain

Diane Hoffmann, JD - Jacob A. Frenzel Professor of Health Care Law, University of Maryland School of Law

Christie Hessing, CPMA - Co-founder and President Chronic Pain Network

Description: This session will bring together four chronic pain advocates who have been effective in securing funding for research, pain care, and pain care reform. Ms. Hoffmann will use her episodic for treatment of chronic pain, and have worked at the state level to develop a comprehensive chronic pain strategy, and have worked at the federal level to secure funding and have involved in advocacy/policy work. These advocates will share how they have gotten into policy/advocacy and techniques that have been successful in achieving their goals.

Objectives: Translational aspects of central sensitization in the human pain experience

Anne Louise Oaklander, MD, PhD - Associate Professor Harvard Medical School

Anne Hood, PhD - Assistant Professor Johns Hopkins University School of Medicine

Description: Up to 31 experts in pain dysfunctionality research will participate in a workshop on our collective work to date and discussion of areas for advancement. This workshop will be the 3rd in a series of workshops that took place for the first time in October 2019 and in Washington in 2020. The goal of these group meetings is to develop a consensus on the current state of the field, to identify gaps in knowledge and pre-clinical pain research that can be applied to the broader pain research and clinical pain community. Presentations will be synthesized analysis from the unique perspectives of this group of experts in the field of pain research, including Dr. Dwyer (clinical pharmacology), Dr. Lenz (psychiatry, physical therapy) and Ewalu (i.e., graduate students through full professors). Dr. Dwyer will discuss the work of the Pain Research, Phenotyping, and Kinetics (PRPK) Consortium of Pain Research, 2. Anti-Racist Dissemination of Pain Research, 3) Potential Impact of Publication Bias.

Lynda Lenz, PhD - Assistant Professor Johns Hopkins University

Lindsey Yessick - PhD Candidate, Queen's University

Calla Morris, PhD - Postdoctoral Fellow University of Florida

Lisa Campbell, PhD - Assistant Professor East Carolina University

Title: Update from 2020 Pain Affairs Awardees

Peter Grace, PhD - Postdoctoral Fellow MD Anderson

Vivienne Tawfik, MD, PhD - Assistant Professor Stanford University

Description: Two hard there is not more time to hear about all the exciting work this group is doing, but this fast paced session will allow the attendees a sense of what this talented group has been up to.

Jordan McCall, PhD, MPH - Assistant Professor Washington University

Waughan Crewell, PhD - Postdoctoral Fellow Washington University

Matthew Bangham, PhD, MPH - Postdoctoral UC San Diego

Michael Burton, PhD - Assistant Professor UT Dallas

Title: Are You Complicit in Patients with Chronic Pain Receiving Unnecessary Surgical and Pain Procedures?

Alexandra St. John, DNP, FNP - Assistant Professor Oregon Health & Science University

Alan Dupree Jones, PhD, PsM, FAAN - Dean & Professor Samaritan School of Nursing

Description: This provocative session will address the following proposal: If providers identify and treat fibromyalgia/depressed pain prior to referring for surgical and pain procedures, unnecessary surgeries and pain procedures will be avoided. Evidence suggests using patients the following round question as a simple screen to select fibromyalgia in patients with chronic pain: "I have persisted deep aching over most of my body".

Ronald Friend, PhD - Emeritus Professor Storytelling University

Ann Bruno Jones, PhD, PsM, FAAN - Dean & Professor Samaritan School of Nursing